

National Institutes of Health Bethesda, Maryland 20892

Technical Progress Report for the period 1 July 1998 to 30 September 1998

"Epidemiologic Studies of Radiation Induced Thyroid Disease in Belarus (BelAM Thyroid Project) and Ukraine (UkrAm Thyroid Project)"

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Submission date: 15 October 1998

1. BelAm Thyroid Project

Due to the summer vacation schedules it was impractical to have a program review visit during the July-September period. The next visit is scheduled for late October.

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Realizing that it is difficult for people to come to Minsk for screening examinations, it was decided to initiate a mobile team approach to reach outlying locations, notably in the Gomel Oblast. The mobile teams presently use borrowed equipment and vehicle, I fully expect that, if this operation proves to be successful, we will be asked to provided dedicated equipment in the future.

The question of opening a branch in Gomel has not been resolved. The leadership in Minsk seems to be reluctant to go this route favoring centralized operations in Minsk with mobile team coverage of the more distant locations. We feel that such an extension, especially in light of the presence of the Japanese group in Gomel, would be quite necessary for us in order to reach the size of cohort we need. Obviously we will continue to press this point, pursuing this topic vigorously or, if this fails, looking for other means for assuring that the projected cohort numbers will be reached.

Both the screening group and the central laboratory moved or are about to be moved to another location from their currently occupied site. It is not going to be as convenient for the screenees to reach that place because it is farther from the railroad station. We will be watching this development carefully for signs of possible decrease in the number of screenees. We have learned nothing yet about similar move of the epidemiology, dosimetry and DCC offices to another location and they continue to work in the cramped quarters at the old location of the Institute.

During the last visit to Minsk we noticed various signs of what we though was a "turf battle" between the DCC staff and primarily the screening group. We felt that this difficulty was resolved after our session. However, the difficulty was not in the "turf" but in disagreement between the head of DCC and project/Institute leadership. It became more intense after our departure and in September Mr. Kuvshinnikov resigned from his Institute position. He continues to carry our his duties under some special arrangement that the Project Director was able to arrange. This situation will be our principal administrative topic for discussion during our next visit to the BelAm project along with the Gomel issue and implementation of quality assurance measures. Technically Mr. Kuvshinnikov is eminently qualified for this position and his departure would have a detrimental effect on data management operations.

The Abbott IMX instrument has been repaired and the laboratory is able to continue determinations of the hormone levels. The staff of our equipment/supply agent (VANAC) continue to negotiate with Abbott headquarters in Chicago for the payment for this repair.

With all the difficulties of phasing in the screening operation, during the past 9 months 3,000 subjects have been screened and 11 new, previously undiagnosed cancers have been found.

2. UkrAm Thyroid Project

Analogously to Minsk, no site visit was attempted in Kyiv during the July-September period. However, during August Dr. Mincey was able to spend three weeks in Kyiv working hand-in-hand with the available DCC, Epidemiology, Quality Assurance and Laboratory staff. This was the period when the computers were released from the customs and his assistance on the spot was greatly appreciated. He is presently again in Kyiv continuing his technical support and plans to stay there till mid-December.

In spite of the summer vacation period the mobile teams continued to cover remote sites in Kyiv and Chernyhiv Oblasts alternating between the work in the field and examinations at the central Kyiv facility. They average about 100 subjects per trip (three working days available per week considering the travel, set-up, dismantling and return). They are informed repeatedly that many individuals would not have been able to go to Kyiv for their examinations, so this method is the only practical solution in reaching the cohort members. The teams are enthusiastically applying themselves often working past their usual hours.

After the last visit in June the quality assurance work picked up and the senior individual assigned this responsibility is working hard on developing proper documentation for all functions. Hopefully this will become an operational reality in contrast to Belarus where some reluctance predominates in implementing this methodology.

Analogously to the situation in Minsk, the director of DCC resigned in Summer to take a

job outside the health system. As of this writing no replacement has been found. Hopefully the programmer who was working closely with the old director will grow into his new responsibilities which he undertook after the sudden departure of Mr. Derzhavets.

TECHNICAL REPORT for the period 1 July 1998 to 30 September 1998

"Study or Leukemia and Other Hematologic Diseases Among Cleanup Workers in Ukraine Following the Chornobyl Accident (UkrAm Leukemia Project)"

Submitted by: Ihor J. Masnyk, Ph.D. U.S. Project Director REB, DCB, NCI

Submission date: 15 October 1998

After the computers were cleared through the customs the work in several groups intensified substantially. The network was established joining the Central Registry staff with the Epidemiology group which at about the same time was relocated to the Registry building. This development will have a positive effect on their operations.

The physical dosimetry group (Dr. Chumak) has been relocated from the Sviatoshyn Center to the parent building of SRCM. Unfortunately, the site needed major renovation s before it could be occupied and ready for normal operations. Most of the summer was lost for this group because they could not take over their new facility. At least part of the problem is lack of funds to complete this renovation. If this will continue, Chumak's work may be affected to the detriment of the project.

Several trips by principal staff members were made to various Oblasts Medical Centers establishing a network of organizations that would be providing the flow of patients if Phase II were to be implemented. The pilot field work called for in the protocol, i.e., locating individuals who have not been seen in polyclinics for several years, interviewing representative subjects, and preparing to bleed a sample of 20 representative subjects, is well under way. An issue has arise concerning the necessity for paying subjects asked to come in for an interview and blood drawing. This will have to resolved at our next visit to the Center.

In September two site visits were made in smaller working groups. Dr. Finch visited the hematologists and bio-dosimetrists and Dr. Beebe concentrated on the epidemiology work. Dr. Finch and Dr. Burch, together with the hematologic staff, was preparing the program of the anticipated pathology review of representative leukemia and lymphoma cases using material from all 6 oblasts in the plans for Phase II. The review will be carried out in mid-January 1999 in Kyiv by a team of Ukrainian, American and French pathologists and hematologists.

Contacts have been maintained with the French IPSN group coordinated through Dr. Bouville and Dr. Beebe by correspondence and also at an international meeting of dosimetrists in Lyon. Dr. Tirmarche was unable to join Dr. Beebe in Kyiv during his last visit because she was

grounded in Munich (strike at the airport) and current plans call for a short meeting at the RCRM in October which hopefully she might be able to attend.

A workshop is planned for December on the techniques of computerized record linkage to be held in Kyiv by Dr. G. Howe. Participants for this hands-on exercise will be invited from all our projects. Dr. Kortushin, director of the State Registry, will host the workshop.

One individual from Dr. Chumak's laboratory spent a month in the laboratory of Dr. Haskel at the University of Utah where he was able to compare his work with that of Dr. Haskel in measuring the EPR spectra of teeth enamel which is one of the tools for determining the accumulated dosage of people exposed to radiation fallout.